

## JOB OFFER

Position in the project:	Msc Student
Scientific discipline:	physics, quantum optics
Job type (employment contract/stipend):	stipend
Number of job offers:	2
Remuneration/stipend amount/month :	1.500 PLN/month
Position starts on:	01.10.2017
Maximum period of contract/stipend agreement:	1.10.2017-30.03.2019
Institution:	Institute of Physics Faculty of Physics, Astronomy and Informatics Nicolaus Copernicus University in Toruń, Poland
Project leader:	Dr. Piotr Kolenderski
Project title:	<i>Applications of single-photon technologies</i>  <b><i>Project is carried out within the First Team programme of the Foundation for Polish Science</i></b>
Project description:	The research project aims at developing: 1) single-photon sources and single photon characterization techniques, and their 2) applications in a selection of problems, which have a high potential to be solved using carefully prepared states of photons. Those problems are quantum communication with single-mode fibers and free space link using satellite receiver, efficient entangled two-photon absorption and quantum

	interference with nanostructures .
Key responsibilities include:	<ol style="list-style-type: none"> <li>1. Analytical modeling of a coherent dynamics of multilevel atomic systems subject to an illumination with nonclassical light</li> <li>2. Corresponding numerical simulations.</li> </ol>
Profile of candidates/requirements:	<ol style="list-style-type: none"> <li>1. Basic experience in quantum optics and atomic physics; familiarity to density matrix formalism for open quantum systems will be welcome.</li> <li>2. Basic experience in Python programming or Mathematica modeling.</li> <li>3. Excellent spoken and written English.</li> </ol>
Required documents:	<ol style="list-style-type: none"> <li>1. CV</li> <li>2. Motivation letter</li> <li>3. Contact details to at least one academic referee</li> <li>4. Confirmation of the student status</li> </ol>
We offer:	<p>Monthly stipend,  Access to computational tools,  Coverage of participation in at least one conference.</p>
Please submit the following documents to:	<p><a href="mailto:kolenderski@fizyka.umk.pl">kolenderski@fizyka.umk.pl</a></p> <p>In case of a successful application, please provide the original documents within a week to the project leader</p>
Application deadline:	September 28, 2017 9:00am CET
For more details about the position please visit (website/webpage address):	the website <a href="http://www.fizyka.umk.pl/fizyka_en">www.fizyka.umk.pl/fizyka_en</a>
Euraxess job/stipend offer (in case	

of PhD and postdoc positions):

Please include in your offer:

“I hereby give consent for my personal data included in my application to be processed for the purposes of the recruitment process under the Personal Data Protection Act as of 29 August 1997, consolidated text: Journal of Laws 2016, item 922 as amended.”